



## Compliance Component

### DEFINITION

<i>Name</i>	Cryptography for Stored Data
<i>Description</i>	Cryptography for Stored Data is encryption at the storage level, protecting data at rest using a symmetric key block cipher algorithm.
<i>Rationale</i>	Cryptography for Stored Data provides confidentiality and integrity of the data. It enables secure labeling, storing, and transferring of data.
<i>Benefits</i>	<ul style="list-style-type: none"> <li>Protects against accidental compromise or alteration of data. Local encryption will facilitate the prevention of accidental unauthorized access, and will decrypt data only under prescribed control.</li> <li>Protects against intentional compromise or alteration of data. If the storage device is physically compromised, the perpetrator will only find ciphered text rather than clear data.</li> </ul>

### ASSOCIATED ARCHITECTURE LEVELS

<i>List the Domain Name</i>	Security
<i>List the Discipline Name</i>	Technical Controls
<i>List the Technology Area Name</i>	Cryptography
<i>List Product Component Name</i>	

### COMPLIANCE COMPONENT TYPE

<i>Document the Compliance Component Type</i>	Guideline
<i>Component Sub-type</i>	

### COMPLIANCE DETAIL

<i>State the Guideline, Standard or Legislation</i>	<ul style="list-style-type: none"> <li>The two approved cipher block algorithms for data storage are:               <ol style="list-style-type: none"> <li>Advanced Encryption Standard (AES), and</li> <li>Triple Data Encryption Standard (TDES or 3DES).</li> </ol> </li> <li>A symmetric key to the block cipher must be established beforehand among the parties to the data and requires well-designed key management structure.</li> <li>Sensitive or critical data should be encrypted when on a physically unsecured device, such as a laptop, removable hard drive, CD. etc., outside of a controlled facility.</li> </ul>
<i>Document Source Reference #</i>	

### Standard Organization

<i>Name</i>	NIST SP 800-49	<i>Website</i>	<a href="http://csrc.nist.gov/publications/nistpubs/800-49/sp800-49.pdf">http://csrc.nist.gov/publications/nistpubs/800-49/sp800-49.pdf</a>
<i>Contact Information</i>			

Government Body			
Name	NIST	Website	<a href="http://csrc.nist.gov">http://csrc.nist.gov</a>
Contact Information			
KEYWORDS			
List all Keywords			
COMPONENT CLASSIFICATION			
Provide the Classification	<input type="checkbox"/> Emerging	<input checked="" type="checkbox"/> Current	<input type="checkbox"/> Twilight <input type="checkbox"/> Sunset
Rationale for Component Classification			
Document the Rationale for Component Classification			
Conditional Use Restrictions			
Document the Conditional Use Restrictions			
Migration Strategy			
Document the Migration Strategy			
Impact Position Statement			
Document the Position Statement on Impact			
CURRENT STATUS			
Provide the Current Status	<input type="checkbox"/> In Development	<input type="checkbox"/> Under Review	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Rejected
AUDIT TRAIL			
Creation Date	04/13/2004	Date Accepted / Rejected	4/13/04
Reason for Rejection			
Last Date Reviewed		Last Date Updated	
Reason for Update			